

REMARKS

The application has been amended to place it in condition for allowance at the time of the next Official Action.

Claims 15-26 and 35 were previously pending in the application. New claims 36-40 are added. Therefore, claims 15-26 and 35-40 are presented for consideration.

Claims 15, 17-20, 23, 26 and 35 were rejected under 35 USC 103(a) as being unpatentable over MELET 6,555,065. That rejection is respectfully traversed.

Claim 35 is amended and recites that different positions of the electronic switch valves enable a task to be carried out with one of plural syringes, while others of the plural syringes have a neutralized function, although respective pistons of the others of the plural syringes carry out a single movement with said one of said plural syringes.

Support for this feature can be found at least in the description page 5, lines 17-20. By this feature, any one of the syringes can be used, while the other syringes are neutralized, although the pistons of all the syringes are moving in a single movement. Exemplary syringes that can be used have been introduced into the first part of claim 35 (based on the description page 5, lines 1-8).

The position set forth in the Official Action is that it would have been obvious to put all the syringes rigidly linked to each other so that they simultaneously carry out a single

movement, in order to reduce the number of motors and simply place them all together for easier access.

However, such a layout is not obvious to one of ordinary skill in the art and moreover, would render the device of MELET unsatisfactory for its intended purpose for the following reasons:

First, MELET already mentions that the invention is of very compact size (see column 1, line 32-33), and that the device is designed with a careful grouping of the various elements constituting the device (see column 1, lines 52-53).

In view of this, one of ordinary skill in the art would consider that the structure of the device according to MELET is already particularly optimized based on the careful grouping of elements and would not consider rearranging the elements as suggested in the Official Action.

Moreover, MELET does not suggest putting together and driving together the pistons 11, 12, 13 on the one hand, and the piston of the air pump 14 on the other hand. Thus, absent applicant's disclosure, there is no suggestion to make such a configuration.

Indeed, such an arrangement raises the following problem: if all the pistons are linked to each other, a syringe can not be used without implying a movement of the pistons of the

other syringes. The Official Action considers that it is possible to neutralize the piston of the air pump 14 as the valve EV16 can be opened to the environment.

However, the valve EV16 is intended to control the pressure inside the ducts and not to neutralize the air pump 14 which would be moved.

Second, even if a neutralization of the syringe forming the air pump 14 can be contemplated, while using the other syringes (related to reagent), the contrary, i.e. the neutralization of at least one of the syringes related to reagents is not obvious at all for the one skilled in the art, while using the syringe forming the air pump. Such a scenario is typically the problem that the present invention intends to resolve and is not suggested by MELET.

Finally, the proposed modification would render the device of MELET unsatisfactory for its intended purpose.

Column 4, lines 62 to column 5, line 4 of MELET discloses actuating motor M1 (that drives air pump 14) to drive (expel) liquid and simultaneously actuating motor M2 (that drive syringes 11-13) to aspirate (draw in) diluent.

If the syringes 11-13 and air pump 14 were operated by a single motor (using a single movement), it would be impossible to simultaneously withdraw and expel as required in the operation of MELET.

Accordingly, the proposed modification not only would be non-obvious, but also would render the device of MELET unsatisfactory for its intended purpose.

Therefore, one of ordinary skill in the art would not have been motivated to make the proposed modification.

New claims 36-40 are added. Support for the new claims can be found at least in the previous claims, in the description at page 4, lines 1-24 and Figures 2 and 3.

Claim 36 further defines the structure and arrangement of the collector which forms a support for the electronic switch valves and the casings of the syringes.

Claims 37-38 further define the collector and recites a network of ducts. It is accordingly very compact, of low cost design and particularly adapted to prevent breakdown and various leaks (see objects of the invention, page 1, lines 27-29).

New claims 39 and 40 are directed to features of the air pump. For the reasons set forth above with respect to claim 35, the air pump of MELET does not meet nor could be modified to meet the recited air pump.

Claims 16, 22 and 24 were rejected under 35 USC 103(a) as being unpatentable over MELET in view of BACHENHEIMER 4,607,526; claim 21 was rejected under 35 USC 103(a) as being unpatentable over MELET in view of KIM 5,648,225; and claim 21 was rejected under 35 USC 103(a) as being unpatentable over MELET

in view of JOTTIER 4,231,990. These rejections are respectfully traversed.

Although the secondary references to BACHENHEIMER, KIM and JOTTIER appear to teach the features for which they were applied, nevertheless, none of these features relates to the fundamental features of novelty of the present invention as defined in independent claim 35. Accordingly, claims 16, 21, 22, 24 and 25 are believed to be patentable at least for depending from allowable independent claim 35.

As the claims now in the case clearly bring out these distinctions with ample particularity, it is believed that they are all patentable, and reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Liam McDowell/
Liam McDowell, Reg. No. 44,231
Customer No. 00466
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

LM/fb